

# Installation Instructions

KIT PC. No. 282134

FIELD MAINTENANCE KIT DV-2 AUTOMATIC DRAIN VALVE

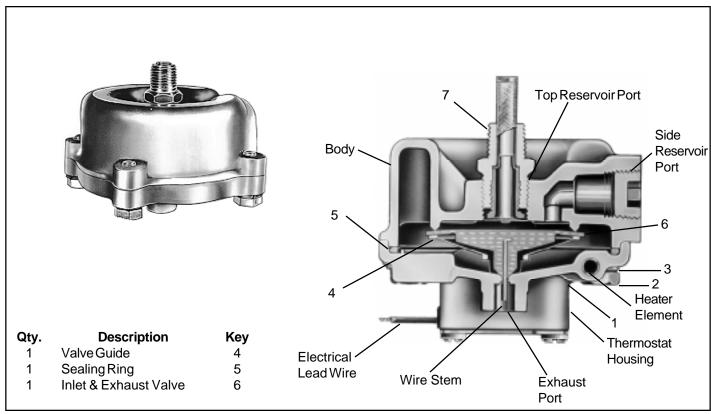


Figure 1 DV-2 WITH HEATER & THERMOSTAT

# IMPORTANT! PLEASE READ AND FOLLOW THESE INSTRUCTIONS TO AVOID PERSONAL INJURY OR DEATH:

When working on or around a vehicle, the following general precautions should be observed at all times.

- 1. Park the vehicle on a level surface, apply the parking brakes, and always block the wheels.
- 2. Stop the engine when working around the vehicle.
- 3. If the vehicle is equipped with air brakes, make certain to drain the air pressure from all reservoirs before beginning ANY work on the vehicle.
- 4. Following the vehicle manufacturer's recommended procedures, deactivate the electrical system in manner that removes all electrical power from the vehicle.
- 5. When working in the engine compartment the engine should be shut off. Where circumstances require that the engine be in operation, EXTREME CAUTION should be used to prevent personal injury resulting from contact with moving, rotating, leaking, heated, or electrically charged components.

- Never connect or disconnect a hose or line containing pressure; it may whip. Never remove a component or plug unless you are certain all system pressure has been depleted.
- 7. Never exceed recommended pressures and always wear safety glasses.
- 8. Do not attempt to install, remove, disassemble or assemble a component until you have read and thoroughly understand the recommended procedures. Use only the proper tools and observe all precautions pertaining to use of those tools.
- Use only genuine Bendix replacement parts, components, and kits. Replacement hardware, tubing, hose, fittings, etc. should be of equivalent size, type, and strength as original equipment and be designed specifically for such applications and systems.
- 10. Components with stripped threads or damaged parts should be replaced rather than repaired. Repairs requiring machining or welding should not be attempted unless specifically approved and stated by the vehicle or component manufacturer.
- 11. Prior to returning the vehicle to service, make certain all components and systems are restored to their proper operating condition.

NOTE: This kit will service both the heated version of the DV-2 (as shown in Figure 1) as well as the standard version. Early version DV-2 drain valves were built with a filter and filter retainer in the inlet port. We have found these are not necessary, and they have been eliminated. When rebuilding a valve, we suggest these parts be discarded.

#### **REMOVAL**

- 1. Block and hold vehicle by means other than air brakes.
- 2. Drain air system.
- 3. Disconnect heater wire if valve is so equipped.
- 4. Remove automatic reservoir drain valve.

# **DISASSEMBLY**

- 1. Remove four cap screws (2) and lock washers (3).
- 2. Remove cover (1) and sealing ring (5).

  NOTE: The heater and thermostat of the DV-2's so equipped are not serviceable. If the heater or thermostat has failed, the entire cover must be replaced. Do not remove the thermostat cover plate. It is moisture sealed and removal could result in early thermostat failure.
- 3. Remove valve guide (4).
- 4. Remove inlet and exhaust valve (6).
- 5. Remove adapter and filter assembly (if filter present).
- 6. Remove filter retainer (if any) and discard.
- 7. Remove filter (if any) and discard.

#### **ASSEMBLY**

Prior to assembly, clean the cover and body, inspect inlet seat area for nicks and scratches. Remove any nicks or scratches found with fine emery cloth.

- 1. Place sealing ring (5) in groove of cover (1).
- 2. Place valve guide (4) over inlet and exhaust valve(6).
- 3. Place valve guide and inlet and exhaust assembly into cover (1) (Wire will project through exhaust port).
- 4. Place body on cover and install cap screws (2) and lock washers (3). Torque to 80-120 inch pounds.
- 5. Install adapter or pipe nipple in appropriate port. Torque to 130-170 inch pounds.
- 6. Install drain valve in reservoir and reconnect heater wire if drain valve is so equipped.
  - NOTE: Covers on the standard and heated drain valves can be interchanged.

#### **INSTALLATION**

- 1. To avoid early fouling at the DV-2, thoroughly flush and clean the reservoir before installing the drain valve.
- 2. Aerate any tank thoroughly if any solvents have been used in the cleaning process.
- 3. Reconnect the electrical lead, if the valve is so equipped.

# **OPERATING TEST**

With system charged, make several foot valve applications and note each time an application is made, an exhaust of air occurs at the exhaust port of the drain valve. If no air comes out, push the wire stem. If no air comes out, there may be a plugged filter in the adapter which should be removed and discarded.

### **LEAKAGETEST**

With system charged and pressure stabilized in system, there should be no leaks at the drain valve exhaust. A constant slight exhaust of air at the drain valve exhaust could be caused by excessive leakage in the air brake system.

